

09/502,534

09/502,120

1/39/4

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat
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12950966

Basic Patent (No,Kind,Date): JP 6188294 A2 19940708 <No. of Patents: 005>

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date
JP 6188294	A2	19940708	JP 93124458	A	19930526 (BASIC)
JP 8068772	A2	19960312	JP 95126723	A	19950525
US 5578821	A	19961126	US 371458	A	19950111
US 5665968	A	19970909	US 607191	A	19960226
US 5717204	A	19980210	US 606854	A	19960226

Priority Data (No,Kind,Date):

US 889460 A 19920527
US 252763 A 19940602
US 371458 A 19950111
US 889460 B1 19920527
US 607191 A 19960226
US 252763 B1 19940602
US 889460 B2 19920527
US 606854 A 19960226

PATENT FAMILY:

JAPAN (JP)

Patent (No,Kind,Date): JP 6188294 A2 19940708

EQUIPMENT AND METHOD OF AUTOMATIC SUBSTRATE INSPECTION USING CHARGED PARTICLE BEAM (English)

Patent Assignee: KLA INSTR CORP

Author (Inventor): DAN MAISUBAAGAA; ARAN DEII BUROODEII; ANIRU EE DESAI; DENISU JII EMUGE; TSUON UEI CHIEN; RICHIYAADO SHIMONZU; DEEBU II EE SUMISU; EIPURIRU DATSUTA; JIEI KAAKUUTSUDO EICHI RAFU; RESURII EE HONFUI; HENRII PIASU PAASHI; JIYON MAKUMAATORII; ERITSUKU MANROO

Priority (No,Kind,Date): US 889460 A 19920527

Applic (No,Kind,Date): JP 93124458 A 19930526

IPC: * H01L-021/66; G01R-031/302

Derwent WPI Acc No: * G 95-001507; G 95-001507

Language of Document: Japanese

Patent (No,Kind,Date): JP 8068772 A2 19960312

APPARATUS AND METHOD FOR AUTOMATIC MASK INSPECTION BY USING ELECTRON BEAM MICROSCOPY (English)

Patent Assignee: KLA INSTR CORP

Author (Inventor): DAN MAISUBAAGAA; ARAN DEII BUROODEII; TSUON UEI CHIEN; JIYATSUKU WAI JIYOO; BURAIAN JIEI GURENON

Priority (No,Kind,Date): US 252763 A 19940602

Applic (No,Kind,Date): JP 95126723 A 19950525

IPC: * G01N-023/225; G01M-011/00; G01N-023/203; G21K-005/04; H01J-037/28; H01L-021/66

Derwent WPI Acc No: * C 96-197514; C 96-197514

Language of Document: Japanese

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5578821 A 19961126

ELECTRON BEAM INSPECTION SYSTEM AND METHOD Electron beam inspection system and method (English)

Patent Assignee: KLA INSTR CORP (US)

Author (Inventor): MEISBERGER DAN (US); BRODIE ALAN D (US); DESAI ANIL A (US); EMGE DENNIS G (US); CHEN ZHONG-WEI (US); SIMMONS RICHARD (US); SMITH DAVE E A (US); DUTTA APRIL (US); ROUGH J KIRKWOOD H (US); HONFI LESLIE A (US); PEARCE-PERCY HENRY (US);

MCMURTRY JOHN (US); MUNRO ERIC (GB)
 Priority (No,Kind,Date): US 371458 A 19950111; US 889460 B1 19920527
 Applic (No,Kind,Date): US 371458 A 19950111
 National Class: * 250310000; 250311000; 250396000R; 250396000ML; 250397000
 IPC: * H01J-037/00
 Derwent WPI Acc No: * G 95-001507
 Language of Document: English
 Patent (No,Kind,Date): US 5665968 A 19970909
 INSPECTING OPTICAL MASKS WITH ELECTRON BEAM MICROSCOPY (English)
 Patent Assignee: KLA INSTR CORP (US)
 Author (Inventor): MEISBURGER DAN (US); BRODIE ALAN D (US); CHEN ZHONG-WEI (US); JAU JACK Y (US); GRENON BRIAN J (US)
 Priority (No,Kind,Date): US 607191 A 19960226; US 252763 B1 19940602; US 889460 B2 19920527
 Applic (No,Kind,Date): US 607191 A 19960226
 National Class: * 250310000; 250306000; 250307000
 IPC: * H01J-037/26
 Derwent WPI Acc No: * C 96-197514; G 95-001507
 Language of Document: English
 Patent (No,Kind,Date): US 5717204 A 19980210
 INSPECTING OPTICAL MASKS WITH ELECTRON BEAM MICROSCOPY (English)
 Patent Assignee: KLA INSTR CORP (US)
 Author (Inventor): MEISBURGER DAN (US); BRODIE ALAN D (US); CHEN ZHONG-WEI (US); JAU JACK Y (US)
 Priority (No,Kind,Date): US 606854 A 19960226; US 252763 B1 19940602; US 889460 B2 19920527
 Applic (No,Kind,Date): US 606854 A 19960226
 National Class: * 250310000; 250306000; 250307000; 250397000
 IPC: * H01J-037/26
 Derwent WPI Acc No: * C 96-197514; G 95-001507
 Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5578821	P	19920527	US AA	PRIORITY
			US 889460 B1	19920527
US 5578821	P	19950111	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 371458 A	19950111
US 5578821	P	19950728	US AS02	ASSIGNMENT OF ASSIGNOR'S INTEREST
			KLA INSTRUMENTS CORPORATION 160 RIO ROBLES STREET SAN JOSE, CALIFORNIA 95161-905 ;	
			MEISBERGER, DAN : 19950526; BRODIE, ALAN D. : 19950607; DESAI, ANIL A. : 19950313; EMGE, DENNIS G. : 19950327; CHEN, ZHO : 19950607;	
US 5578821	P	19961126	US A	PATENT
US 5665968	P	19920527	US AA	PRIORITY
			US 889460 B2	19920527
US 5665968	P	19940602	US AA	PRIORITY
			US 252763 B1	19940602
US 5665968	P	19960226	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 607191 A	19960226
US 5665968	P	19970909	US A	PATENT
US 5717204	P	19920527	US AA	PRIORITY
			US 889460 B2	19920527
US 5717204	P	19940602	US AA	PRIORITY

US 5717204 P US 252763 B1 19940602
19960226 US AE APPLICATION DATA (PATENT)
(APPL. DATA (PATENT))
US 606854 A 19960226
US 5717204 P 19980210 US A PATENT
US 5717204 P 20000502 US RF REISSUE APPLICATION FILED
(REISSUE APPL. FILED)
20000210
US 5717204 P 20000801 US RF REISSUE APPLICATION FILED
(REISSUE APPL. FILED)
20000210

Source: All Sources : Area of Law - By Topic : Patent Law : Patents : U.S. Patents : Utility Patents Terms: **patno is 5717204** ([Edit Search](#))**Pat. No. 5717204, *****5,717,204**◆ GET 1st DRAWING SHEET OF 20

Feb. 10, 1998

Inspecting optical masks with electron beam microscopy

REISSUE: Reissue Application filed Feb. 10, 2000 (O.G. Aug. 1, 2000) Ex. Gp.: 2878; Re. S.N. 09/502,534

Reissue Application filed Feb. 10, 2000 (O.G. May 2, 2000) Ex. Gp.: 2878; Re. S.N. 09/502,120

INVENTOR: Meisburger, Dan, San Jose, California
Brodie, Alan D., Palo Alto, California
Chen, Zhong-Wei, San Jose, California
Jau, Jack Y., Fremont, California**ASSIGNEE-AT-ISSUE:** KLA Instruments Corporation, San Jose, California (02)**APPL-NO:** 606,854**FILED:** Feb. 26, 1996**REL-US-DATA:**

Continuation of Ser. No. 252,763, Jun. 2, 1994 now abandoned Which is a continuation-in-part of Ser. No. 889,460, May 27, 1992 now abandoned

INT-CL: [6] H01J 37#26**US-CL:** 250#310; 250#306; 250#307; 250#397**CL:** 250**SEARCH-FLD:** 250#310, 306, 307, 492.1, 397**REF-CITED:****U. S. PATENT DOCUMENTS**


5,502,306	3/1996	*	Meisburger et al.	250#310
5,578,821	11/1996	*	Meisburger et al.	250#310

PRIM-EXMR: Nguyen, Kiet T.**LEGAL-REP:** Jones; Allston L.**CORE TERMS:** electron, mask, substrate, secondary, beam, waveform, detector, inspection, backscatter, electron beam, computer, scan, optical, pixel, phase, quartz, deflection, die, chromium, region, column, lens, alignment, conductive, electrode, layer, energy, memory, processor, correspond**ABST:**

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Questel-Orbit:

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PN - US 5717204 [US5717204]

AP - US 606854/96 19960226 [1996US-0606854]

DT - US-P

ACT - 19960226 US/AE-A

APPLICATION DATA (PATENT)

{US 606854/96 19960226 [1996US-0606854]}

- 19980210 US/A

PATENT

- 20000502 US/RF

REISSUE APPLICATION FILED

20000210

- 20000801 US/RF

REISSUE APPLICATION FILED

20000210

UP - 2000-31

1/2 PAST - (C) PAST

AN - 200031-001329

PN - 5717204 A [US5717204]

DT - A (UTILITY)

OG - 2000-08-01

CO - REA

ACT - REISSUE APPLICATION FILED

SH - REISSUE APPLICATION FILED

1/1 CRXX - (C) CLAIMS/RRX

AN - 2940859

PN - 5,717,204 A 19980210 [US5717204]

PT - E (Electrical)

PA - Kla Instruments Corp

ACT - 20000210 REISSUE REQUESTED

Issue Date of O.G.: 20000502

Reissue Request Number: 09/502120

Examination Group responsible for Reissue process: 2878

- 20000210 REISSUE REQUESTED

Issue Date of O.G.: 20000801

Reissue Request Number: 09/502534

Examination Group responsible for Reissue process: 2878

UP - 2000-18

UACT- 2000-08-01